

IN THE CLAIMS:

Please amend claims 1-6, 9, 12-22, 26, and 29 as follows:

1. (currently amended) A method for determining whether a substance is an activator or an inhibitor of ~~a function of a protein~~ an inflammatory process in which a macrophage is in a hyperactivated status due to up-regulated ARL4 comprising: (a) ~~contacting~~ applying the protein with a substance to be tested a test system which generates a measurable read-out upon modulation of a biological function of ARL4, wherein the protein is selected from the group consisting of: MIF, DAD1, ARL4, GNS, Transglutaminase 2, Stearyl-CoA-Desaturase and UDP-Glucose-Ceramide Glycosyltransferase; and (b) ~~measuring whether the function is inhibited or activated~~ comparing the level of read-out of the test system to a control level, wherein a difference in levels indicates the substance is an inhibitor or an activator of ARL4; and wherein the inhibitor of ARL4 which is expressed at a higher level in said hyperactivated macrophage indicates the substance which inhibits or reduces said hyperactivated status of said macrophage.
2. (cancelled).
3. (currently amended) The method according to claim 1 wherein the inhibition or activation of the ~~function~~ inflammatory process is measured directly.
4. (currently amended) The method according to claim 1 wherein the inhibition or activation of the ~~function~~ inflammatory process is measured indirectly.
5. (cancelled).
6. (cancelled).
7. (original) The method according to claim 1 wherein the method is performed using a cellular system.

8. (original) The method according to claim 1 wherein the method is performed using a cell-free system.
9. (currently amended) A method for determining an expression level of a protein ARL4 comprising: (a) determining the level of ~~the protein ARL4~~ in a hyperactivated macrophage, ~~wherein the protein is selected from the group consisting of: MIF, DAD1, ARL4, GNS, Transglutaminase 2, Stearyl-CoA-Desaturase and UDP-Glucose Ceramide Glycosyltransferase;~~ (b) determining the level of ~~the protein ARL4~~ in a non-hyperactivated macrophage, ~~wherein the protein is selected from the group consisting of: MIF, DAD1, ARL4, GNS, Transglutaminase 2, Stearyl-CoA-Desaturase and UDP-Glucose Ceramide Glycosyltransferase;~~ and (c) comparing the level of ~~the protein ARL4~~ expressed in step (a) to the level of ~~the protein ARL4~~ expressed in step (b), wherein a difference in levels indicates a differentially expressed ~~protein ARL4~~.
10. (original) The method according to claim 9 wherein the hyperactivated macrophage is a mammalian macrophage and the non-hyperactivated macrophage is a mammalian macrophage.
11. (original) The method according to claim 10 wherein the hyperactivated macrophage is a human macrophage and the non-hyperactivated macrophage is a human macrophage.
12. (currently amended) A method for diagnosing or monitoring a chronic inflammatory airway disease comprising: (a) determining the level of ~~the protein ARL4~~ in a hyperactivated macrophage, ~~wherein the protein is selected from the group consisting of: MIF, DAD1, ARL4, GNS, Transglutaminase 2, Stearyl-CoA-Desaturase and UDP-Glucose Ceramide Glycosyltransferase;~~ (b) determining the level of ~~the protein ARL4~~ in a non-hyperactivated macrophage, ~~wherein the protein is selected from the group consisting of: MIF, DAD1, ARL4, GNS, Transglutaminase 2, Stearyl-CoA-Desaturase and UDP-Glucose Ceramide Glycosyltransferase;~~ and (c) comparing the level of ~~the protein ARL4~~ expressed in step (a) to the level of ~~the protein ARL4~~

expressed in step (b), wherein a difference in levels indicates a differentially expressed ~~protein~~ ARL4.

13. (currently amended) The method according to claim 12 wherein the chronic inflammatory airway disease is selected from the group consisting of: chronic bronchitis and COPD.

Claims 14-20 (cancelled).

21. (currently amended) A method for treating a chronic inflammatory airway disease comprising: administering to a subject ~~in need of such treatment~~ an effective amount of a pharmaceutical composition comprising at least one substance determined to be an activator or an inhibitor of a ~~protein selected from the group consisting of: MIF, DAD1, ARL4, GNS, Transglutaminase 2, Stearyl CoA Desaturase and UDP Glucose Ceramide Glycosyltransferase.~~
22. (currently amended) A method for treating a chronic inflammatory airway disease comprising: administering to a subject ~~in need of such treatment~~ an effective amount of a pharmaceutical composition comprising at least one substance determined to be an activator or an inhibitor of a ~~protein selected from the group consisting of: MIF, DAD1, ARL4, GNS, Transglutaminase 2, Stearyl CoA Desaturase and UDP Glucose Ceramide Glycosyltransferase~~ according to the method of claim 1.
23. (original) The method according to claim 21 wherein the subject is a mammal.
24. (original) The method according to claim 21 wherein the subject is a human.
25. (original) The method according to claim 21 wherein the chronic inflammatory airway disease is selected from the group consisting of: chronic bronchitis and COPD.
26. (currently amended) A method for selectively modulating a ~~protein selected from the group consisting of MIF, DAD1, ARL4, GNS, Transglutaminase 2, Stearyl CoA Desaturase and UDP Glucose Ceramide Glycosyltransferase~~ in a macrophage,

comprising administering a substance determined to be an activator or an inhibitor of ~~a protein selected from the group consisting of MIF, DAD1, ARL4, GNS, Transglutaminase 2, Stearyl-CoA-Desaturase and UDP-Glucose-Ceramide Glycosyltransferase.~~

27. (original) The method according to claim 26 wherein the macrophage is involved in a chronic inflammatory airway disease.
28. (original) The method according to claim 27 wherein the chronic inflammatory airway disease is selected from the group consisting of: chronic bronchitis and COPD.
29. (currently amended) A method for selectively modulating ~~a protein selected from the group consisting of MIF, DAD1, ARL4, GNS, Transglutaminase 2, Stearyl-CoA-Desaturase and UDP-Glucose-Ceramide Glycosyltransferase~~ in a macrophage, comprising administering a substance determined to be an activator or an inhibitor of ~~a protein selected from the group consisting of MIF, DAD1, ARL4, GNS, Transglutaminase 2, Stearyl-CoA-Desaturase and UDP-Glucose-Ceramide Glycosyltransferase~~ according to the method of claim 1.